

WHAT IS CLAIMED IS:

1. A method for dynamically assigning a network region to a network endpoint, comprising:

receiving a request for a network address from a network endpoint;

determining the network address for the network endpoint;

determining a network region for the network endpoint; and

communicating the network address and a network location parameter specifying the network region to the network endpoint.

2. The method of Claim 1, wherein:

the network address is an Internet protocol (IP) address;

the network endpoint is an IP phone; and

the network endpoint communicates packet data comprising voice information using transport control protocol/Internet protocol (TCP/IP).

3. The method of Claim 1, wherein determining the network address comprises:

determining a network path along which the request is communicated; and

determining the network address based on the network path.

4. The method of Claim 1, wherein determining the network region comprises:

determining a subnet address portion of the network address; and

determining the network region based on the subnet address portion.

5. The method of Claim 1, wherein determining the network region comprises:

determining a priority level associated with the network endpoint; and

determining the network region based on the priority level.

6. The method of Claim 1, wherein the network location parameter comprises time-length-value (TLV) data.

7. A server, comprising:

an interface operable to receive a request for a network address from a network endpoint;

a memory operable to store a data structure relating a plurality of network addresses to a plurality of network regions; and

the processor, operable to construct a response to the request for communication to the network endpoint using the interface, the response comprising the network address for the network endpoint and a network location parameter specifying the network region.

8. The server of Claim 7, wherein:

the network address is an Internet protocol (IP) address;

the network endpoint is an IP phone; and

the network endpoint communicates packet data comprising voice information using transport control protocol/Internet protocol (TCP/IP).

9. The server of Claim 7, wherein the processor is further operable to determine the network address for the network endpoint based on a network path along which the request is communicated.

10. The server of Claim 7, wherein the network region is determined based on a subnet address portion of the network address.

11. The server of Claim 7, wherein the data structure further relates the network region to a priority level associated with the network endpoint.

12. The server of Claim 7, wherein the network location parameter comprises time-length-value (TLV) data.

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13. Logic embodied in a computer-readable medium operable to cause a server to perform the following steps:

receiving a request for a network address from a network endpoint;

determining the network address for the network endpoint;

determining a network region for the network endpoint; and

communicating the network address and a network location parameter specifying the network region to the network endpoint.

14. The logic of Claim 13, wherein determining the network address comprises:

determining a network path along which the request is communicated; and

determining the network address based on the network path.

15. The logic of Claim 13, wherein determining the network region comprises:

determining a subnet address portion of the network address; and

determining the network region based on the subnet address portion.

16. The logic of Claim 13, wherein determining the network region comprises:

determining a priority level associated with the network endpoint; and

determining the network region based on the priority level.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

17. A call manager, comprising:

an interface operable to receive a call request from a network endpoint, the call request comprising a call destination;

a memory operable to store a data structure relating a plurality of network address to a plurality of network regions; and

a processor operable to perform the steps of:

determining an originating network address of the network endpoint;

determining an originating network region based on the originating network address of the network endpoint;

determining a destination network address of the call destination;

determining a destination network region based on the destination network address for the call destination;

selecting a codec based on the originating network region and the destination network region; and

communicating a response indicating the selected codec to the network endpoint using the interface.

18. The call manager of Claim 17, wherein the step of determining the originating network region of the network endpoint further comprises:

determining a subnet address portion of the network address; and

determining the originating network region based on the subnet address portion.

19. The call manager of Claim 17, wherein:

the network address is an IP address;

the network endpoint is an IP phone; and

the network endpoint communicates packet data comprising voice information using transport control protocol/Internet protocol (TCP/IP).

20. The call manager of Claim 17, wherein selecting the codec comprises:

determining an available bandwidth of a network connection between the originating network region and the destination network region; and

selecting the codec based on the available bandwidth.

21. The call manager of Claim 20, wherein selecting the codec further comprises:

determining a priority level associated with the network endpoint; and

selecting the codec based on the priority level.

22. A network endpoint, comprising:

an interface operable to couple the network endpoint
to a network; and

a processor operable to:

detect that the interface is coupled to a
network at a network location;

communicate a request for a network address
using the interface;

receive, from the interface, the network
address;

determine a network region for the network
endpoint; and

communicate via the interface a request to
establish a communication between the network endpoint
and a call destination; and

use the network region to enable selection of a
codec for the communication.

23. The network endpoint of Claim 22, wherein:

the network location comprises a first network location, the request for a network address comprises a first request, the network address comprises a first network address, the network region comprises a first network region, and the processor is further operable to:

detect that the interface is coupled to the network at a second network location;

communicate a second request for a network address using the interface;

receive a second network address from the interface; and

determine a second network region for the network endpoint.

24. The network endpoint of Claim 22, wherein:

the network address is an IP address;

the network endpoint is an IP phone; and

the network endpoint communicates packet data comprising voice information using transport control protocol/Internet protocol (TCP/IP).

25. The network endpoint of Claim 22, wherein the processor is further operable to use a priority level associated with the network endpoint to enable selection of the codec.

26. The network endpoint of Claim 22, wherein the processor determines the network region based on a network location parameter received from the interface.

27. The network endpoint of Claim 22, wherein the processor determines the network region based on a data structure relating a plurality of network addresses to a plurality of network regions.

28. The network endpoint of Claim 22, wherein:

the network endpoint further comprises a memory operable to store a plurality of codecs; and

the processor uses the network region to select one of the codecs.

29. The network endpoint of Claim 22, wherein the processor uses the network region to enable selection of a codec by communicating the network region to a call manager operable to select a codec based on the network region.

30. A method for dynamically assigning a network region to a network endpoint, comprising:

detecting that a network endpoint is coupled to a network at a network location;

communicating from the network endpoint a request for a network address;

receiving a network address for the network endpoint;

determining a network region for the network endpoint;

communicating a request for a communication between the network endpoint and a call destination; and

using the network region to enable selection of a codec for the communication.

31. The method of Claim 30, wherein:

the network address is an IP address;

the network endpoint is an IP phone; and

the network endpoint communicates packet data comprising voice information using transport control protocol/Internet protocol (TCP/IP).

32. The method of Claim 30, wherein:

the network location comprises a first network location, the request for a network address comprises a first request, the network address comprises a first network address, the network region comprises a first network region, and the method further comprises:

detecting that the network endpoint is coupled to the network at a second network location;

communicating a second request for a network address;

receiving a second network address; and

determining a second network region for the network endpoint.

33. The method of Claim 30, wherein determining the network region for the network endpoint comprises:

receiving a network location parameter; and

determining the network region based on the network location parameter.

34. The method of Claim 30, wherein determining the network region for the network endpoint comprises:

retrieving from memory a data structure relating a plurality of network address with a plurality of network regions; and

determining the network region of the network endpoint based on the network address using the data structure.

35. The method of Claim 30, wherein using the network region to enable selection of a codec comprises using the network region to select one of a plurality of codecs stored in a memory of the network endpoint.

36. The method of Claim 30, wherein using the network region to enable selection of a codec comprises communicating the network region to a call manager operable to select the codec for the communication.

37. Logic embodied in a computer-readable medium operable to perform the steps of:

detecting that a network endpoint is coupled to a network at a network location;

communicating from the network endpoint a request for a network address;

receiving a network address for the network endpoint;

determining a network region for the network endpoint;

communicating a request for a communication between the network endpoint and a call destination; and

using the network region to enable selection of a codec for the communication.

38. The logic of Claim 37, wherein determining the network region for the network endpoint comprises:

receiving a network location parameter; and

determining the network region based on the network location parameter.

39. The logic of Claim 37, wherein determining the network region for the network endpoint comprises:

retrieving from memory a data structure relating a plurality of network address with a plurality of network regions; and

determining the network region of the network endpoint based on the network address using the data structure.

